## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.00	Rating **	Α	Issue No.		10
LM End	0.00	Issue Type +	Ma	Location *		N/A
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item		s & Maintena	nce	39.1940	83°	39.194083°
пеш	Manuals			-121.9355	12°	-121.935512°
DWR ID	DWR_ST0	003_01_f _ 2010	6_10			
		Comn	nent Cod	de		
		Inspecto	or Comm	nent		
LMA has C	O+M manu	al.				

No Photos

Issue No. Rating \*\* 0.00 Α 15 LM Start 0.00 Issue Type + Ма Location \* N/A LM End Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & 39.194083° 39.194083° Item Equipment -121.935512 ° -121.935512° DWR\_ST0003\_01\_f \_ 2016\_15 DWR ID Comment Code

No Photos

Inspector Comment

LMA has a stockpile of supplies.

LM Start	0.00	Rating **	Α	Issue No.		16
LM End	0.00	Issue Type +	Ma	Location *		N/A
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Flood Preparedness & Training			39.1940	83°	39.194083°
пеш				-121.9355	12°	-121.935512°
DWR ID	DWR_ST00	003_01_f _ 2010	6_16			
Comment Code						

No Photos

Inspector Comment

The LMA attends annual training and maintains emergency response plans.

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

M : Minimally Acceptable C : Corrected

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.11	Rating **	М	Issue No.		130	
LM End	0.14	Issue Type +	Ма	Location * WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		39.1951	63 °	39.195038°	
пеш				-121.9368	15 °	-121.937435 °	
DWR ID DWR_ST0003_01_s _ 2017_130							
		Comn	nent Cod	de			
S1 : Repa	ir slope ins	tability.					
		Inspecto	or Comn	nent			
Repair the erosion along the waterside slope.							

Photo 1 of 1 : FA\_2018\_ST0003\_264\_130\_20180905\_00030.jpg



View of the erosion along the waterside slope.

LM Start	0.24	Rating **	М	Issue No.	82	
LM End	0.24	Issue Type +	Ma	Location *	WS	
Category Earthen Levee				GPS La	atitud	le/Longitude
Calegory	alegory					End
Item	Slope Sta	bility		39.1952	34°	39.195234°
пеш				-121.9391	24°	-121.939124°
DWR ID DWR_ST0003_01_f _ 2016_82						·
Comment Code						

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

No Photos

LM Start	0.42	Rating **	Rating ** M			81
LM End	0.42	Issue Type +	Type + Ma Location			WS
Category Earthen Levee				GPS La	titud	e/Longitude
Calegory				Start		End
Item	Slope Sta	bility		39.1964	83 °	39.196483°
item				-121.9422	28 °	-121.942228°
DWR ID DWR_ST0003_01_f _ 2016_81						

Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment



View of the ruts along the waterside slope.

\* Location
LS : Land Side N/A : Not Applicable

WS : Water Side
CR : Crown

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type
Ma : Mainte

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.51	Rating **	A/W	Issue No.	137		
LM End	0.51	Issue Type +	Ma	Location *			
Category Supplemental				GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.1970	28°	39.197028°	
item				-121.9435	97°	-121.943597°	
DWR ID	D 17307						
		Comn	nent Coo	le			

#### Inspector Comment

FS ID:51650 DS\_ID:17307 EP\_NO: 9534

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 10/27/2017 This structure is inspected annually under the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and Inspection Branch (FPIIB). (DWR UCIP - O. Magana) 4/24/2017 Both sides of crossing were underwater during site visit.

Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)]. FS Date: 4/26/2017 9:46:51 AM

LM Start	0.51	Rating **	A/W	Issue No.	137 (cont)
LM End	0.51	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_FA\_2018\_51650\_46962.jpg



Waterside view: overview towards CMP sewer pipe

Photo 2 of 3: UCIP\_FA\_2018\_51650\_46960.jpg



Waterside view: water flowing from CMP sewer pipe

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.51	Rating **	A/W	Issue No.	137 (cont)		
LM End	0.51	Issue Type +	Ma	Location *			
Supplemental				GPS La	atitud	le/Longitude	
Category			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.1970	28°	39.197028°	
пеш				-121.9435	97°	-121.943597°	
DWR ID	17307						
	Comment Code						

#### Inspector Comment

FS\_ID:51650 DS\_ID:17307 EP\_NO: 9534

Repair Type: No Action Needed Crossing Status: Found

FS Date: 4/26/2017 9:46:51 AM

UCIP Comments: 10/27/2017 This structure is inspected annually under the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and Inspection Branch (FPIIB). (DWR UCIP - O. Magana) 4/24/2017 Both sides of crossing were underwater during site visit. Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)].

Photo 3 of 3: UCIP\_FA\_2018\_51650\_46961.jpg



Landside view: overview

LM Start	<b>0.54</b> Rating ** M			Issue No.		9	
LM End	0.68	Issue Type +	Ma	Location *		WS	
Category	Earthen L		GPS La	titud	e/Longitude		
Calegory				Start		End	
Item	Encroachments			39.1972	67°	39.198178°	
пеш			-121.9442	32°	-121.946412°		
DWR ID	DWR_ST0	003_01_s _ 201	7_9				
Comment Code							

DE: Debris

## Inspector Comment

Remove the debris from the waterside slope.

## Photo 1 of 1: FA\_2018\_ST0003\_264\_9\_20180905\_00007.jpg



View of the debris along the waterside slope.

\* Location

LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.17	Rating **	М	Issue No.		80	
LM End	1.17	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		39.1941	26°	39.194126°	
пеш				-121.953345 °		-121.953345°	
DWR ID DWR_ST0003_01_f _ 2016_80							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
Inspector Comment							

## Photo 1 of 1 : FA\_2018\_ST0003\_264\_80\_20180905\_00018.jpg



View of the slope instability along the waterside slope.

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139	
LM End	1.44	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	nsibility	39.192502°		39.192502°	
item				-121.9580	62 °	-121.958062°
DWR ID	17320					
Comment Code						

#### Inspector Comment

FS\_ID:53400 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR

Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 8/30/2018 1:02:00 PM



Waterside view: overview of river bank

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	e No. 139 (cont	
LM End	1.44	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	nsibility	39.192502°		39.192502°	
item				-121.9580	62°	-121.958062°
DWR ID	17320					
Comment Code						

#### Inspector Comment

FS\_ID:53400 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 8/30/2018 1:02:00 PM



Waterside view: water flowing from outlet pipe (pipe fully submerge)

Page 8 of 50

#### Flood Control Project Maintenance Levee Inspections

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44 Rating ** U			Issue No.		139 (cont)	
LM End	1.44	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UCI	nsibility	39.1925	)2 °	39.192502°		
пеш				-121.9580	62°	-121.958062°	
DWR ID	17320						
Comment Code							

#### Inspector Comment

FS\_ID:53400 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 8/30/2018 1:02:00 PM

Photo 3 of 3: UCIP\_FA\_2018\_53400\_46990.jpg

Landside view: overview of levee slope

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.45	Rating **	М	Issue No.		86	
LM End	2.46	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
			Start		End		
Item	Trim / Thi	Trim / Thin Trees			11°	39.187955 °	
item				-121.974591 °		° -121.974693	
DWR ID	DWR_ST00	003_01_f _ 2016	6_86				
		Comn	nent Cod	de			
T1 : Trim t	rees to at I	east five feet	above g	round level.			
Inspector Comment							

No Photos

LM Start	2.56	Rating **	М	Issue No.		143	
LM End	2.56	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.18876	8°	39.188768	0
пеш				-121.97630	5°	-121.976305	0
DWR ID	17309						

## Comment Code

## Inspector Comment

FS\_ID:51660 DS\_ID:17309 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD\_STRUCT\_DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)]. FS Date: 4/26/2017 10:46:22 AM



Waterside view: overview- concrete surg tank

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.56	Rating **	М	Issue No.		143 (cont)	
LM End	2.56	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.18876	88°	39.188768°	
пеш				-121.97630	)5 °	-121.976305°	
DWR ID	17309						
Comment Code							

## Inspector Comment

FS\_ID:51660 DS\_ID:17309 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)]. FS Date: 4/26/2017 10:46:22 AM

LM Start	2.56	Rating **	М	Issue No.	143 (cont)
LM End	2.56	Issue Type +	Ma	Location *	



Waterside view: overview- concrete surg tank

#### Photo 3 of 3: UCIP\_FA\_2018\_51660\_47025.jpg



Waterside view: slide gate inside concrete surg tank

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.84	Rating **	М	Issue No.		104	
LM End	2.84	Issue Type +	Ma	Location *	WS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Slope Stability		Slope Stability			62 °	39.191162°	
пеш				-121.980365 °		-121.980365 °	
DWR ID	DWR_ST0	003_01_s _ 201	8_104				
		Comn	nent Cod	de			
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.							
		Inspecto	or Comm	nent			

Repair the erosion along the water side slope caused by vehicle traffic.



View of the erosion along the waterside slope caused by vehicle traffic.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

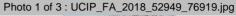
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.		144		
LM End	3.32	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.1968	65 °	39.196865°		
пеш				-121.98528	30°	-121.985280 °		
DWR ID	17311							
	Comment Code							

#### Inspector Comment

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log. 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM





LS view of water exiting the pipe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

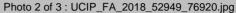
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.		144 (cont)		
LM End	3.32	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
ltom	DWR UCI	P LMA Respo	nsibility	39.1968	65 °	39.196865°		
Item			-121.9852	80°	-121.985280 °			
DWR ID	VR ID 17311							
	Comment Code							

#### Inspector Comment

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log. 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM





LS view from levee shoulder

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.		144 (cont)
LM End	3.32	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.19686	5°	39.196865°
пеш			-121.98528	o°	-121.985280 °	
DWR ID	17311					·

#### Inspector Comment

Comment Code

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log. 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM

Photo 3 of 3: UCIP\_FA\_2018\_52949\_76921.jpg



WS view of the temporary plug on WS end.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.68	Rating **	М	Issue No.	146		
LM End	3.68	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.2018	31 °	39.201831°	
item				-121.9840	06°	-121.984006°	
DWR ID 17313							
Comment Code							

#### Inspector Comment

FS\_ID:51666 DS\_ID:17313 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Slide gate structure found on WS about 10ft from levee toe. Vegetation was too thick to see if there were any more appurtances associated with this crossing visible on the WS. Nothing was visible on the LS. House located above pipe alignment at LS levee toe. Crossing appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.6)]. FS Date: 4/26/2017 12:11:41 PM

LM Start	3.68	Rating **	М	Issue No.	146 (cont)
LM End	3.68	Issue Type +	Ma	Location *	

Photo 1 of 2: UCIP\_FA\_2018\_51666\_77004.jpg



Slide gate structure found on WS

Photo 2 of 2: UCIP\_FA\_2018\_51666\_77005.jpg



View of WS from levee shoulder

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.75	Rating **	М	Issue No.	105		
LM End	4.76	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		39.2135	09°	39.213665 °	
пеш				-121.9919	93°	-121.992220 °	
DWR ID	DWR_ST0	003_01_f _ 201	6_105				
		Comn	nent Coo	de			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
	Inspector Comment						

No Photos

LM Start	6.47	Rating **	М	Issue No.	99			
LM End	6.47	Issue Type +	Ma	Location *	LS			
Catagory	Earthen L	evee		GPS Latitude/Longitude				
Calegory	Category					End		
Item	Vegetatio	n		39.224719° 39.2247′				
item				-121.9986	23 °	-121.998623°		
DWR ID DWR_ST0003_01_f _ 2016_99								
Comment Code								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



View of the overgrown vegetation along the landside slope.

LM Start	6.47	Rating **	М	Issue No.	106			
LM End	6.47	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory				Start		End		
Item	Encroach	ments		39.2248	12°	39.224812°		
пеш				-121.9986	15°	-121.998615°		
DWR ID DWR_ST0003_01_s _ 2018_106								
	Comment Code							

TR: Tree or limb

Inspector Comment

Remove the down tree from the landside slope.



View of the downed tree along the landside slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable AW: Acceptable but Monitor & Maintain Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.75	Rating **	M	Issue No.		97				
LM End	6.75	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End				
Item	Slope Sta	bility		39.2282	91 °	39.228291 °				
пеш				-121.998579°		-121.998579°				
DWR ID	DWR_ST0	003_01_f _ 2016	6_97							
		Comn	nent Coc	de						
S1 : Repai	r slope ins	tability.								
		Inspecto	or Comm	nent						

No Photos

Rating \*\* Issue No. 6.76 М LM Start 136 Issue Type + Location \* WS LM End 6.79 Ma Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 39.228311° 39.228730° Item -121.998555° -121.998109 ° DWR\_ST0003\_01\_f \_ 2017\_136 DWR ID Comment Code

No Photos

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:11

Site Designation:DWR\_ST0003\_01\_s\_2012\_30

Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Rodent activity seems to be the source of the problem. Local runoff/rainfall eroded the rodent holes to an advanced state of erosion that could continue with future exposure to wet conditions. Simple fix for the issue would be to grout the holes. Problem levee is a set-back levee.

CR : Crown

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160
LM End	7.72	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory						End
Item	DWR UCI	P LMA Respo	nsibility	39.23945	8°	39.239458 °
пеш				-121.99339	8°	-121.993398°
DWR ID	17301					

#### Inspector Comment

Comment Code

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned and erosion still present near WS box.(DWR Sutter Yard-Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015 Silted concrete box on WS. Depression/erosion around concrete box on WS.Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.1/218/2013 Same as last inspection. FIELD STRUCT DESC: \*ABANDONED\* 36-inch by 48-inch reinforced

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.73)].
FS Date: 4/26/2017 2:38:29 PM

 LM Start
 7.72
 Rating \*\*
 M
 Issue No.
 160 (cont)

 LM End
 7.72
 Issue Type +
 Ma
 Location \*

## Photo 1 of 3 : UCIP\_FA\_2018\_51695\_77008.jpg



Depression around WS concrete box

## Photo 2 of 3: UCIP\_FA\_2018\_51695\_77009.jpg



depression around WS concrete box

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160 (cont)	
LM End	7.72	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UCI	P LMA Respo	nsibility	39.23945	8°	39.239458°	
пеш		,			8°	-121.993398°	
DWR ID	17301						

## Inspector Comment

Comment Code

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016
Abandoned and erosion still present near WS box.(DWR Sutter Yard-Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015
Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.73)].

FS Date: 4/26/2017 2:38:29 PM



WS concrete box full of silt.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.		161			
LM End	8.32	Issue Type +	Ма	Location *					
Category			Supplemental				GPS La	titud	e/Longitude
Calegory	Category					End			
Item	DWR UCI	P LMA Respo	onsibility	39.2463	17°	39.246317°			
item			-121.99882	25 °	-121.998825 °				
DWR ID	17304								

#### Inspector Comment

Comment Code

FS ID:51698 DS\_ID:17304 EP\_NO: 9529

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM

LM Start	8.32	Rating **	М	Issue No.	161 (cont)
LM End	8.32	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP\_FA\_2018\_51698\_47202.jpg



Crown view: overview (both sides of the levee)

#### Photo 2 of 3: UCIP FA 2018 51698 47201.ipg



Waterside view: overview of CMP riser

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.	161 (cont)					
LM End	8.32	Issue Type +	Ma	Location *						
Category	Supplemental			Supplemental			GPS Lat	tuc	le/Longitude	
Calegory				Start		End				
Item	DWR UCI	P LMA Respo	onsibility	39.24631	7°	39.246317	0			
пеш				-121.99882	5 °	-121.998825	0			
DWR ID	17304									

#### Inspector Comment

Comment Code

FS\_ID:51698 DS\_ID:17304 EP\_NO: 9529

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM



Landside view: overview of concrete box

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163			
LM End	8.52	Issue Type +	Ма	Location *					
Supplemental			GPS Latitude/Longitude						
Calegory	TY			Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.24912	25°	39.249125°			
пеш				-121.99903	81 °	-121.999031 °			
DWR ID	17295								
	Comment Code								

#### Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM

Photo 1 of 3: UCIP\_FA\_2018\_51725\_47208.jpg



Waterside view: overview of CMP riser

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163 (cont)		
LM End	8.52	Issue Type +	Ма	Location *				
Category				GPS La	tituc	le/Longitude		
Calegory	ory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.24912	25 °	39.249125°		
пеш				-121.99903	31 °	-121.999031 °		
DWR ID	D 17295							
	Comment Code							

#### Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM

## Photo 2 of 3 : UCIP\_FA\_2018\_51725\_47207.jpg



Landside view: overview (no pipes)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163 (cont)		
LM End	8.52	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UC	P LMA Respo	nsibility	39.24912	25 °	39.249125°		
пеш				-121.99903	31 °	-121.999031 °		
DWR ID	17295							
	Comment Code							

#### Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM



WS pipe end

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164	
LM End	8.56	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.24967	'8	39.249678°	
item				-121.99902	11°	-121.999021°	
DWR ID	17327						

#### Inspector Comment

Comment Code

FS\_ID:51726 DS\_ID:17327 EP\_NO: 9528

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

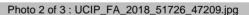
10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM

LM Start	8.56	Rating **	М	Issue No.	164 (cont)
LM End	8.56	Issue Type +	Ma	Location *	



Waterside view: overview





Waterside view: burried slide gate

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164 (cont)
LM End	8.56	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	onsibility	39.24967	8 °	39.249678 °
пеш				-121.99902	1 °	-121.999021 °
DWR ID	17327					·

#### Inspector Comment

Comment Code

FS\_ID:51726 DS\_ID:17327 EP\_NO: 9528

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM



WS pipe end

LM Start	8.65	Rating **	М	Issue No.		94
LM End	8.65	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroach	ncroachments			74°	39.250774°
пеш				-121.9982	42°	-121.998242 °
DWR ID	DWR_ST0	003_01_f _ 2016	6_94			
		Comn	nent Cod	de		
TR : Tree	or limb					

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

licable A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.92	Rating **	N	Issue No.		92			
LM End	8.92	Issue Type +	Ma	Location *		LS			
Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Trim / Thi	n Trees		39.2545	63°	39.254563°			
пеш				-121.997493°		-121.997493°			
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_92								
		Comn	nent Coo	de					
T5 : Tree s	stumps.								
		Inspecto	or Comm	nent					

No Photos

Rating \*\* Issue No. 9.03 LM Start N 91 9.03 Issue Type + Ма Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category End Start Trim / Thin Trees 39.256141° 39.256141° Item -121.997785° -121.997785° DWR\_ST0003\_01\_f \_ 2016\_91 DWR ID Comment Code T5: Tree stumps. Inspector Comment

No Photos

Rating \*\* Issue No. LM Start 9.17 90 9.17 Issue Type + Ma Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 39.257688° 39.257688° Item -121.999331 ° -121.999331 DWR ID DWR\_ST0003\_01\_f \_ 2016\_90 Comment Code T5: Tree stumps. Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.		167
LM End	9.37	Issue Type +	Ма	Location *		
Category	Suppleme	Supplemental				e/Longitude
Calegory	Category					End
Item	DWR UCI	P LMA Respo	nsibility	39.26003	4 °	39.260034°
пеш				-122.00097	0°	-122.000970 °
DWR ID	17355					·

# Inspector Comment

Comment Code

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

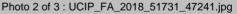
FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)].

FS Date: 5/1/2017 9:16:26 AM

LM Start	9.37	Rating **	A/W	Issue No.	167 (cont)
LM End	9.37	Issue Type +	Ma	Location *	



Waterside view: overview





Waterside view: overview of CMP pipe

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.		167 (cont)	
LM End	9.37	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	category				Start		
Item	DWR UCI	P LMA Respo	nsibility	39.26003	4 °	39.260034°	
пеш				-122.00097	o°	-122.000970 °	
DWR ID	17355					·	

## Inspector Comment

Comment Code

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)].

FS Date: 5/1/2017 9:16:26 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51731\_47240.jpg

Waterside view: capped CMP pipe

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.32	Rating **	М	Issue No.	1			
LM End	10.41	Issue Type +	Ma	Location *		WS		
Category				GPS La	tituc	le/Longitude		
Category				Start		End		
Item		ACE Erosion S	Survey,	39.33144	47 °	39.332716	0	
пеш	DRAFT			-122.029440 °		-122.029953	0	
DWR ID DWR_ST0003_01_f _ 2018_1								
	Comment Code							

#### Inspector Comment

2017 Site ID: SAC 157.7 R

Status: Eroding

2017 Field Notes: Vertical face of clay sand bank, new tree popout.

Bank continues to erode.

Site History: 2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet. 2010 - Some new toe scour.



USACE 2013 Photo #1

LM Start	10.35	Rating **	A/W	Issue No.	168			
LM End	10.35	Issue Type +	Ма	Location *				
Category	ental	GPS La	atituc	le/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.2704	92°	39.270492°		
пеш				-122.0013	06°	-122.001306°		
DWR ID	17358							
Comment Code								

#### Inspector Comment

FS\_ID:51734 DS\_ID:17358 EP\_NO: 9517

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard- Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM

## Photo 1 of 3: UCIP\_FA\_2018\_51734\_47263.jpg



Crown view: overview (both sides of the levee)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.35	Rating **	A/W	Issue No.		168 (cont)		
LM End	10.35	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	onsibility	39.2704	92 °	39.270492°		
пеш		-122.0013	06 °	-122.001306°				
DWR ID	17358					·		

#### Inspector Comment

Comment Code

FS\_ID:51734 DS\_ID:17358 EP\_NO: 9517

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard-Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM

LM Start	10.35	Rating **	A/W	Issue No.	168 (cont)
LM End	10.35	Issue Type +	Ma	Location *	



Waterside view: overview of CMP riser



Waterside view: inside CMP riser

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.36	Rating **	М	Issue No.		5	
LM End	10.36	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		39.2705	03°	39.270503°	
пеш	-122.001339 ° -12					-122.001339°	
DWR ID	DWR_ST00	003_01_s _ 201	2_5				
		Comn	nent Cod	de			
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	bility.	
Inspector Comment							
The Elderberry is partially blocking visibility.							
. , , ,							

No Photos

LM Start	11.53	Rating **	М	Issue No.		Issue No.		Issue No.		8
LM End	11.79	Issue Type + Ma Location *		Location *		WS				
Category	Suppleme	ental	GPS Latitude/Longitude							
Calegory				Start		End				
Item		2017 USACE Erosion Survey,				39.283853°				
itein	DRAFT			-122.01822	1°	-122.016113°				
DWR ID	DWR_ST0	003_01_f _ 2018	3_8							

# Inspector Comment

Comment Code

2017 Site ID: SAC 152.6 L

Status: Eroding

2017 Field Notes: Access Issues - Could not observe

Site History: 2008 - Large rotational/mass failure in the bank with tree slump. 2009 - Minimal new erosion, the tree is leaning further into the river. 2011 - Site extended downstream. 2012 - Minor new erosion and tree roots are further exposed.

## Photo 1 of 1 : FA\_2018\_ST0003\_264\_8\_20180905\_00006.jpg



USACE 2013 Photo #1

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	11.85	Rating **	М	Issue No.	13			
LM End	11.90	Issue Type +	Ма	Location *	WS			
Category Supplemental				GPS La	tituc	le/Longitude		
				Start		End		
Item		CE Erosion S	Survey,	39.2845	88°	39.285298 °		
пеш	DRAFT			-122.01569	90°	-122.015208°		
DWR ID	WR ID DWR_ST0003_01_f _ 2018_13							
	Comment Code							

#### Inspector Comment

2017 Site ID: SAC 152.8 L

Status: Eroding

2017 Field Notes: Minor new erosion observed.

Site History: 2006 - Large rotational/mass failure in the bank with tree slump. Tough clayey toe material. 2007 - Site is between stone revetments with a pump station at the downstream end. 2010 - Erosion is into the levee toe. 2011 - Minor new erosion. 2012 - Minor new erosion.



USACE 2013 Photo #1

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.	176		
LM End	13.38	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility				65 °	39.306065°	
пеш			-122.013112 °		-122.013112°		
DWR ID	17340						
Comment Code							

#### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection.Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: CMP riser with slide gate

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.	176 (cont)		
LM End	13.38	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.306065°		39.306065°	
item				-122.0131	12°	-122.013112°	
DWR ID	17340						
Comment Code							

#### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection.Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: overview of CMP riser and outlet pipe

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.	176 (cont)		
LM End	13.38	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
DWR UCIP LMA Responsibility		39.30606	65 °	39.306065°			
Item				-122.013112 °		-122.013112°	
DWR ID	17340						
Comment Code							

#### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection.Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51749\_47341.jpg



Waterside view: silted concrete lined CMP outlet pipe

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.43	Rating **	М	Issue No.		75		
LM End	13.43	Issue Type +	Ma	Location *	WS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory		Start		End				
Item	Slope Sta	bility	39.3069	19°	39.306919°			
item			-122.013076 °		-122.013076°			
DWR ID	DWR_ST0	003_01_f _ 2010	6_75					
		Comn	nent Cod	de				
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	prevent		
Inspector Comment								



View of the slope instability along the waterside slope.

LM Start	14.50	Rating **	A/W	Issue No.	178			
LM End	14.50	Issue Type +	Ma	Location *				
Category	ental	GPS La	tituc	le/Longitude				
Category				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.3214	29°	39.321429°		
item				-122.0160	79°	-122.016079°		
DWR ID	17330							
Comment Code								

# Inspector Comment

FS\_ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly, (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard-AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved 4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

### Photo 1 of 3: UCIP\_FA\_2018\_51752\_47356.jpg



Waterside view: CMP riser with slide gate

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.50	4.50 Rating ** A/W				178 (cont)
LM End	14.50	Issue Type +	Location *			
Category	Supplemental				atitud	e/Longitude
Calegory	category					End
Item	DWR UCI	39.3214	29°	39.321429 °		
item			-122.0160	79°	-122.016079 °	
DWR ID	17330					

### Inspector Comment

Comment Code

FS ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard-AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved.4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

LM Start	14.50	Rating **	A/W	Issue No.	178 (cont)
LM End	14.50	Issue Type +	Ma	Location *	



Waterside view: levee mile marker

Photo 3 of 3: UCIP\_FA\_2018\_51752\_47360.jpg



Landside view: overview of distribution box

Location + Issue Type N/A: Not Applicable LS: Land Side Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184
LM End	16.30	Issue Type + Ma Lo		Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	Category					End
Item	DWR UCI	39.34417	7°	39.344177°		
пеш				-122.02430	0°	-122.024300 °
DWR ID	17337					

# Inspector Comment

Comment Code

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.29)]. FS Date: 5/1/2017 10:41:07 AM

LM Start	16.30	Rating **	M	Issue No.	184 (cont)
LM End	16.30	Issue Type +	Ma	Location *	



View from crown down WS slope at location of crossing.

#### Photo 2 of 3: UCIP\_FA\_2018\_51759\_75097.jpg



View of LS from crown at location of crossing.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184 (cont)		
LM End	16.30	Issue Type +	Ма	Location *		a Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude		
Calegory	Category					End		
Item	DWR UCI	39.34417	7°	39.344177°				
пеш				-122.02430	o°	-122.024300 °		
DWR ID	17337							

# Inspector Comment

Comment Code

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16,29)]. FS Date: 5/1/2017 10:41:07 AM



Looking up WS slope: bare spot where pipe was previously excavated, video inspected, and backfilled.

LM Start	16.43	Rating **	С	Issue No.		70	
LM End	16.43	Issue Type +	Ma	Location *	LS		
Category	evee	GPS La	titud	le/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		39.34569	95 °	39.345695°	
item		-122.02282	20°	-122.022820 °			
DWR ID	DWR_ST0003_01_f _ 2016_70						
Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

The rodent holes were repaired along the landside slope.

No Photos

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	17.58	Rating **	М	Issue No.		186
LM End	17.58	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Lat	ituc	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.35353	1°	39.353531 °
пеш				-122.00913	8°	-122.009138 °
DWR ID	17329					

#### Inspector Comment

Comment Code

FS ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)].

	,	0:45:36 AM	.0/].						
LM Start 17.58 Rating ** M Issue No. 186 (cont)									
LM End	17.58	Issue Type +	Ма	Location *					



Landside view: overview. No pipe found.

Photo 2 of 3: UCIP\_FA\_2018\_51762\_47386.jpg



Waterside view: slide gate steel structure

Location + Issue Type N/A: Not Applicable LS: Land Side Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	17.58	Rating **	М	Issue No.		186 (cont)	
LM End	17.58	Issue Type +	Ma	Location *			
Category		Supplemental				le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.35353	1°	39.353531 °	0
пеш				-122.00913	3°	-122.009138 °	0
DWR ID	17329						

#### Inspector Comment

Comment Code

FS\_ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016
Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)].

FS Date: 5/1/2017 10:45:36 AM



Waterside view: burried slide gate

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191	
LM End	18.61	Issue Type +	Ma	Location *			
Supplemental G				GPS La	atituc	de/Longitude	
Category			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.3628	66 °	39.362866°	
пеш				-121.9979	93°	-121.997993°	
DWR ID 17345							
Comment Code							

#### Inspector Comment

FS ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection. Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)]. FS Date: 5/1/2017 10:52:46 AM

Rating \*\* A/W Issue No. 191 (cont) 18.61 LM Start Issue Type + Location 3 LM End 18.61 Ma

# Photo 1 of 3: UCIP\_FA\_2018\_51770\_47399.jpg



Waterside view: overview of sliding gate structure

### Photo 2 of 3: UCIP\_FA\_2018\_51770\_47398.jpg



Waterside view: outlet pipe with concrete headwall and floor appron.

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191 (cont)
LM End	18.61	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Lat	itud	e/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.36286	6°	39.362866 °
пеш				-121.99799	3°	-121.997993 °
DWR ID	17345					·

### Inspector Comment

Comment Code

FS\_ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)].

FS Date: 5/1/2017 10:52:46 AM

# Photo 3 of 3: UCIP\_FA\_2018\_51770\_47403.jpg



Waterside view: sloughing at outlet pipe

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.		192	
LM End	18.70	Issue Type +	Ма	Location *			
Category	GPS La	tituc	le/Longitude				
Calegory	Category					End	
Item	DWR UC	P LMA Respo	nsibility	39.3640	67°	39.364067°	
пеш				-121.9977	92 °	-121.997792°	
DWR ID 17346							
Comment Code							

#### Inspector Comment

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM

LM Start	18.70	Rating **	A/W	Issue No.	192 (cont)
LM End	18.70	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_FA\_2018\_51771\_47442.jpg



Waterside view: overview of slide gate structure

Photo 2 of 3: UCIP\_FA\_2018\_51771\_47441.jpg



Waterside view: 8-inch pipe inside 24-inch CMP

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiancy

M : Minimally Acceptable CR : Corrected Ob: Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Not Inspected/Rated M: Maintenance Deficiancy
Ob: Design & System Obsolescence
En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.	192 (cont)			
LM End	18.70	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	DWR UC	P LMA Respo	nsibility	39.3640	67°	39.364067°		
пеш				-121.9977	92 °	-121.997792°		
DWR ID 17346								
Comment Code								

### Inspector Comment

FS ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection. According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM

Photo 3 of 3: UCIP\_FA\_2018\_51771\_47440.jpg



Waterside view: 8-inch pipe and drain gate

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193
LM End	19.19	Issue Type +	Ма	Location *		
Category	Supplemental					le/Longitude
Calegory				Start		End
Item	DWR UCI	DWR UCIP LMA Responsibility				39.370031 °
item				-121.9964	58°	-121.996458°
DWR ID	17347					

#### Inspector Comment

Comment Code

FS ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned-plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM

LM Start	19.19	Rating **	A/W	Issue No.	193 (cont)
LM End	19.19	Issue Type +	Ma	Location *	



Waterside view: overview of abandoned slide gate structure

#### Photo 2 of 3: UCIP\_FA\_2018\_51773\_47446.jpg



Landside view: overview (no pipes)

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193 (cont)	
LM End	19.19	Issue Type +	Ma	Location *			
Category	Suppleme	GPS Lat	tuc	le/Longitude			
Calegory	Category					End	
Item	DWR UCI	IP LMA Respo	onsibility	39.37003	1°	39.370031	0
пеш				-121.99645	3°	-121.996458	0
DWR ID	17347						

#### Inspector Comment

Comment Code

FS ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM



Photo 3 of 3: UCIP\_FA\_2018\_51773\_73781.jpg

WS pipe end and screw gate

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194
LM End	19.55	Issue Type +	Ма	Location *		
Category	Supplemental				titud	e/Longitude
Calegory		Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.3752	21 °	39.375221 °
пеш				-121.9958	78°	-121.995878°
DWR ID	17487					

#### Inspector Comment

Comment Code

FS ID:51775 DS\_ID:17487 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection. FIELD STRUCT DESC: \*ABANDONED\* 36-inch corrugated metal

drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)]. FS Date: 5/1/2017 10:56:50 AM

LM Start	19.55	Rating **	М	Issue No.	194 (cont)
LM End	19.55	Issue Type +	Ma	Location *	



Waterside view: overview

Photo 2 of 3: UCIP\_FA\_2018\_51775\_47448.jpg



Waterside view: abandoned and ruined pipe

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194 (cont)
LM End	19.55	Issue Type +	Ма	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	P LMA Respo	nsibility	39.37522	1°	39.375221°
item				-121.99587	3°	-121.995878°
DWR ID	17487					

### Inspector Comment

Comment Code

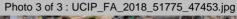
FS\_ID:51775 DS\_ID:17487 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by

drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)].

FS Date: 5/1/2017 10:56:50 AM





Waterside view: abandoned and ruined pipe

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	10/25/2018 10/25/2018	Bob Duffey

LM Start	0.02	Rating **	М	Issue No.		1	
LM End	0.02	Issue Type +	Ma	Location *		LS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		39.2320	58°	39.232058°	
пеш				-121.995514°		4° -121.995514°	
DWR ID	DWR_ST00	003_02_s _ 201	2_1				
		Comn	nent Cod	de			
V4 : Elderk	perries are	blocking visib	ility and	flood fight	сара	bility.	
		Inspecto	or Comm	nent			

No Photos

LM Start	0.37	Rating **	Α	Issue No.		3			
LM End	0.37	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS L	atitud	e/Longitude			
Calegory			Start		End				
Item	Vegetation			39.231415°		39.231415°			
пеш				-121.989060 °		-121.989060 °			
DWR ID	DWR_ST0	003_02_f _ 2018	3_3			·			
		Comn	nent Coc	de					
	V1 : Control annual grass and weeds on the levee slopes and easements.								
Inspector Comment									
The vegeta	ation was b	The vegetation was burned off of both slopes.							



View of no vegetation on both slopes.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Colusa Bypass	Left	2.29	10/25/2018 10/25/2018	Bob Duffey

LM Start	0.67	Rating **	Α	Issue No.		1	
LM End	0.67	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		39.2376	82°	39.237682°	
item				-121.9819	38°	-121.981938°	
DWR ID DWR_ST0003_03_f _ 2018_1							
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
		Inspecto	or Comm	nent			
The vegetation was burned off of both slopes.							



View of no vegetation on both slopes.

LM Start	1.94	Rating **	М	Issue No.		10					
LM End	1.94	Issue Type +	Ma	Location *		LS					
Earthen Levee				GPS La	GPS Latitude/Longitude						
Category			Start		End						
Item	Vegetatio	n		39.244888 °		39.244888 °					
пеш			-121.9655	95 °	-121.965595 °						
DWR ID DWR_ST0003_03_s _ 2012_10											
		Comn	Comment Code								

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	2.13	Rating **	М	Issue No.	Issue No. 2					
LM End	2.13	Issue Type +	Ma	Location *		WS				
Earthen Levee				GPS Latitude/Longitude						
Category				Start		End				
Item	Vegetatio	n		39.244925°		39.244925°				
пеш				-121.9620	72°	-121.962072 °				
DWR ID	DWR_ST0	003_03_s _ 201	5_2			·				
	Comment Code									

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

\* Location

LS : Land Side N/A : Not Applicable

WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Moulton Bypass	Right	0.30	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.10	Rating **	Α	Issue No.		1	
LM End	0.10	Issue Type +	Ма	Location *		LS	
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	า		39.3377	63°	39.337763°	
iteiii	m				42 °	-122.020342°	
DWR ID DWR_ST0003_04_f _ 2018_1							
		Comn	nent Cod	de			
V1 : Contre		rass and wee	eds on th	e levee slo	oes a	and	
Inspector Comment							
The vegetation has been removed from both slopes.							

Photo 1 of 1 : FA\_2018\_ST0003\_267\_1\_20181105\_00001.jpg

View of no vegetation on both slopes.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Moulton Bypass	Left	2.19	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.35	Rating **	Α	Issue No.		2	
LM End	0.35	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	า		39.3432	42°	39.343242°	
пеш				-122.016578 °		-122.016578°	
DWR ID DWR_ST0003_05_f _ 2018_2							
		Comn	nent Cod	de			
V1 : Contro easements		rass and wee	eds on th	e levee slo	pes a	and	
Inspector Comment							
The vegetation has been removed from both slopes.							



View of no vegetation on both slopes.